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## WHAT IS CLAIMED IS:

- 1. A dispersion comprising polyanions and cationic 3,4-polyalkylenedioxythiophenes, wherein at least about 90% of the particles of the dispersion are less than about 50 nm.
- 2. The dispersion according to Claim 1, wherein at least about 90% of the particles are less than about 40 nm.
- 3. The dispersion according to Claim 1, wherein the resistivity of the coatings produced therefrom is at least about 5000  $\Omega$ cm.
- 10 4. The dispersion according to Claim 1, wherein the 3,4-poly-alkylenedioxythiophenes are compounds of the formula (I)

$$\begin{array}{c|c}
 & X & O \\
\hline
 & S & O
\end{array}$$
(1),

wherein

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15 n is an integer from 3 to 100, preferably from 4 to 15, and

X is  $-(CH_2)_X-CR^1R^2-(CH_2)_Y$ , where

 $R^1$  and  $R^2$ , independently of one another, are H, an optionally substituted alkyl radical having from 1 to 20 carbon atoms, an aryl radical having from 6 to 14 carbon atoms or -CH<sub>2</sub>-OR<sup>3</sup>, where  $R^3$  is H, alkyl or -CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-SO<sub>3</sub>H, and

x and y are each, independently of one another, an integer from 0 to 9.

- 5. The dispersion according to Claim 1, wherein the dispersion is a 3,4-polyethylenedioxythiophene/polystyrene sulfonate dispersion.
- 25 6. The dispersion according to Claim 1, wherein the cationic 3,4-polyalkylenedioxythiophene to polyanion have a ratio ranging from between about 1:8 and about 1:25.

- 7. An electroluminescent arrangement containing a hole-injecting layer, wherein the hole-injecting layer has been produced from a dispersion according to Claim 1.
- 8. The electroluminescent arrangement according to Claim 7, wherein polyfluorenes and/or poly-para-phenylenevinylenes are used as light-emitting layer.